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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/594,780

09/29/2006

Yuri Gulevich

FE 6168 (US)

7141

34872

7590

03/11/2009

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EXAMINER

QIAN, YUN

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

03/11/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,780	Applicant(s) GULEVICH ET AL.	
	Examiner YUN QIAN	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-36 is/are pending in the application.
- 4a) Of the above claim(s) 24-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/29/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I. Claims 18-23, drawn to a composition of Lewis base adducts.

Group II. Claims 24-27, drawn to a process for preparing Lewis base adducts.

Group III. Claims 28-33, drawn to a composition of a catalyst.

Group IV. Claims 34-35 drawn to a catalyst system for polymerization.

Group V. Claim 36, drawn to a process of using a catalyst system, classified in class 502, subclass 127.

The inventions are distinct, each from the other because of the following reasons:

The inventions listed as Groups I-V do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Claims 18, 24, 28, 34, and 36 are obvious over Scata et al. (US 4,220,554) which discloses a method of preparing catalyst component for polymerizing alpha-

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olefins by reaction between (a) a Ti containing compound, (b) alkoxy magnesium halide, and (c) an electron-donor compound (abstract, and col.1line 35-col.2line 68).

Accordingly, the special technical feature linking the inventions, such as $\text{MgCl}_n(\text{OR})_{2-n}$.LB, does not provide a contribution over the prior art, and no single general inventive concept exists. Therefore, restriction is appropriate.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of an invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

During a telephone conversation with Jarrod Raphael on March 4, 2009 a provisional election was made with traverse to prosecute the invention of I,

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claims 18-23. Affirmation of this election must be made by applicant in replying to this Office action. Claims 24-36 withdrawn from further consideration by the examiner, 37 CFR 1.142 (b), as being drawn to a non-elected inventions.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of

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35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 18-19 and 22-23 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Scata et al. (US 4,220,554).

Regarding claims 18, and 22-23, Scata et al. discloses a method of preparing catalyst component for polymerizing alpha-olefins by reaction between (a) a Ti containing compound, (b) alkoxy magnesium halide with the structure as shown below:



in which $0 \leq n \leq 2$, R is an alkyl, aryl, cycloalkyl radical containing from 1 to 20 carbon atoms, X is halogen or a group OR' in which R' is an alkyl, aryl or cycloalkyl radical containing from 1 to 20 carbon atoms and is the same or different from R in formula (I).

and (c) an electron-donor compound (Lewis base such as ethers or ester).

The molar ratio of a hydrocarbyl electron-donor compound relative to the Mg dihalide (the p value as in the instant claim 22) is from 0.1 to 0.5, and the n value is $0 \leq n \leq 2$ (abstract, col. 1, line 35-col.col.2, line 68, and claim 9).

The references differ from Applicant's recitations of claims by not disclosing identical ranges. However, the reference discloses "overlapping" ranges, and overlapping ranges have been held to establish prima facie obviousness (MPEP 2144.05).

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Regarding claim 19 as discussed above, the electron donor compound taught by Scata et al is selected from organic ester or ether, which meets the claimed limitations (col.2, lines 16-20 and lines 62-68).

Claims 20-21 rejected under 35 U.S.C. 103(a) as being unpatentable over Scata et al. (US 4,220,554) as applied to claim 18 above, and further in view of Zakharov et al. (WO 96/32426).

Regarding claims 20-21 as discussed above, although Scata et al. teaches using ester or ether as the electron-donor compound, he does not specifically disclose using cyclic ether comprising 3-5 carbon atoms such as THF as per applicant claim 1.

Zakharov et al. teaches a method for the preparation of an alkoxymagnesium halide/Ti compound catalyst system suitable for the polymerization of olefins in the presence of an inert solvent, i.e., dialkyl ether or THF (page 3, lines 19-27, and claim 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Scata and Zakharov to obtain the invention as specified in the claim 1, motivated by the fact that the resulting catalyst is very active for the polymerization, and eliminates additional activation catalyst steps (page 2, lines 8-10).

Since Scata and Zakharov both teach an alkoxymagnesium halide/Ti compound catalyst system suitable for the polymerization of olefins, it would have a reasonable expectation of success. Therefore, the invention as a whole

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would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUN QIAN whose telephone number is (571)270-5834. The examiner can normally be reached on Monday-Thursday, 10:00am -4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/J.A. LORENZO/
Supervisory Patent Examiner, Art Unit 1793

/YUN QIAN/
Examiner, Art Unit 1793